

Chassell
Township
Recreation
Plan

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CHASSELL TOWNSHIP RECREATION PLAN

August, 1980

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This document was prepared in part
through financial assistance provided by
the Coastal Zone Management Act of 1972
administered by the Office of Coastal Zone Management
National Oceanic and Atmospheric Administration

Michigan Department of Natural Resources Recreation U.P.
Services Division

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I

INTRODUCTION

The 1981 Chassell Township Recreation Plan has been written to guide the future recreational development within the Township. The intent of this document is to establish recreational goals for the Township, review the condition of existing programs, and to establish a program for future improvement. It is from this viewpoint that the Chassell Township Recreation Plan has been prepared.

The Recreation Plan has been reviewed and adopted by the Chassell Township Board. A copy of the Board's resolution has been inserted in this Plan.

II COMMUNITY DESCRIPTION

CULTURAL RESOURCES

Location

Chassell Township is located in Houghton County in the Upper Peninsula of Michigan, approximately twelve miles south of the Houghton-Hancock metropolitan area. The township's east boundary is formed by Portage Lake, the Portage River, and Lake Superior's Keweenaw Bay. The Village of Chassell, located on Pike Bay of Portage Lake, is the primary concentration of population in the township. The Village is not incorporated and thus is governed by the township board.

Population

The population of the western Upper Peninsula reached a peak in the 1920s and 1930s when mining and lumbering activities were booming. Since that time there has been a considerable out-migration of residents, in response to the economic decline. The population of Houghton County also followed this trend, decreasing 51.8 percent (71,930 to 34,652) in the period from 1920 to 1970, as has Chassell Township.

Although the population of the region has declined for a number of years, it is beginning to stabilize. The reasons for this include:

- 1) stabilizing economic conditions, including increases in the government and service sectors and an active industrial recruitment program;

- 2) improved opportunities for vocational-technical training, and college expansion programs in the area;
- 3) increasing attractiveness of unspoiled rural areas for residential development;
- 4) improving transportation systems, and
- 5) improving recreational facilities for both tourists and residents.

Population projections to the year 2000 are presented in Figure 1.

Figure 1
Population Projections to the Year 2000

	1960	1970	1980	1990	2000
Houghton County	35,654	34,652	38,300	43,300	48,300
Chassell Township	1,423	1,415	1,572	1,807	2,063
Village of Chassell	650	810	922	1,186	1,362

Source: Western Upper Peninsula Planning and Development Region

There is little census information available on the characteristics of the population of Chassell Township. However, it is evident that there is a considerable influx of tourists during the summer months. For example, the population of the Village of Chassell increases by an estimated 300 persons during the summer. It is also evident that the population of Chassell is characterized by both a significant portion of senior citizens and a college-age population associated with the Michigan Technological University. The township housing stock includes a number of off-campus housing units for the students, as well as fraternity houses.

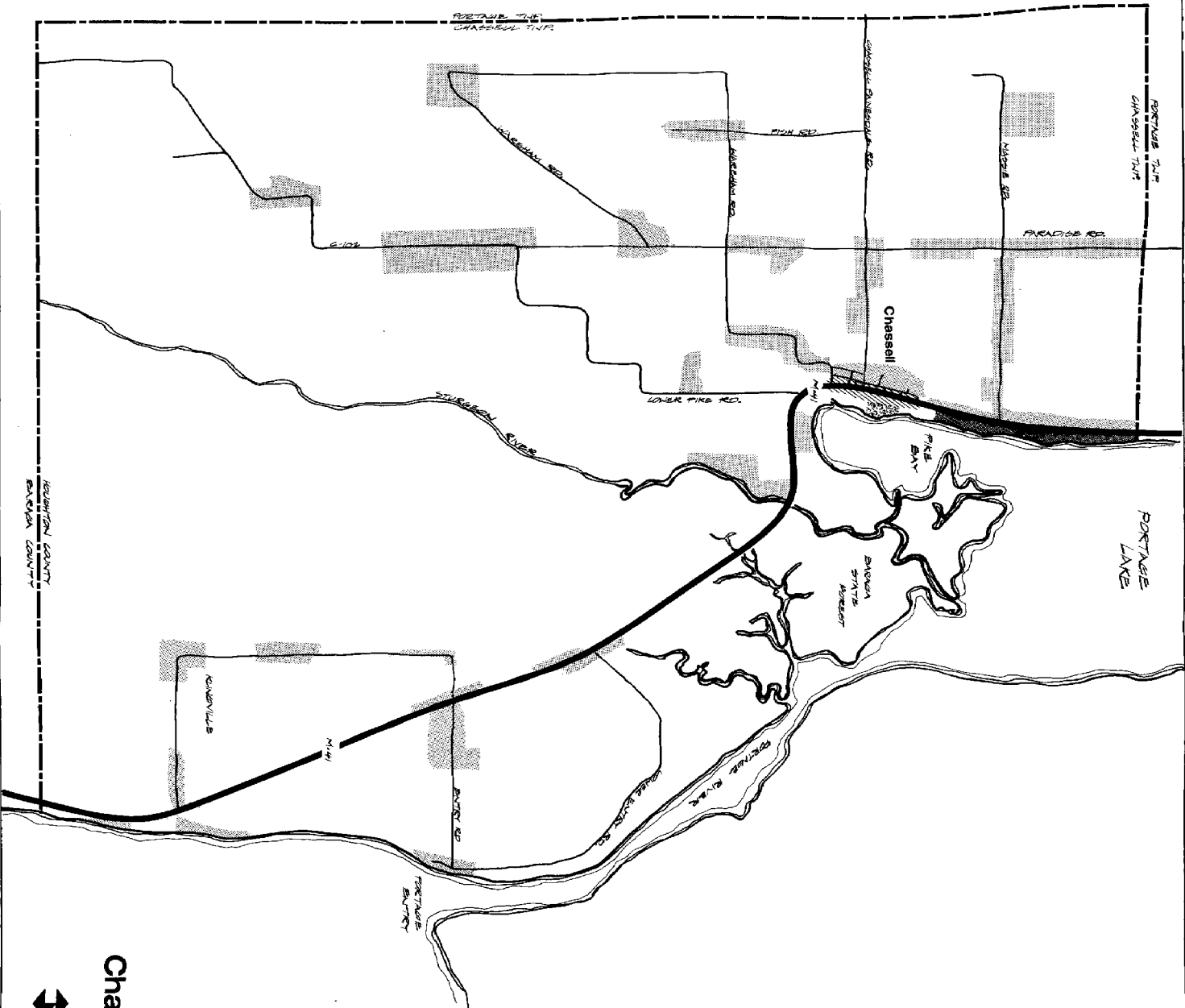
Land Use

Chassell Township is mostly farmed or forested. The land in the central portion of the township, along the lower reaches of the Sturgeon and Snake Rivers, is an expansive marshy area which provides excellent waterfowl habitat. Much of the area at the mouths of these rivers and in the south central portion of the township is part of the Baraga State Forest, owned by the State of Michigan. Strawberry farms also comprise a major land use. Map 1 depicts the present land use in the Township.

The Village of Chassell, located on Pike Bay in the northwestern part of the township, is the main concentration of population. The community is predominantly residential with most homes located along the south and west shorelines of Pike Bay. An exterior housing survey was conducted in 1969, and the results indicated that there are a total of 280 homes in the community. Thirty-one homes, or eleven percent, were new and three homes, or one percent were considered dilapidated and dangerous for human habitation. The town is presently experiencing a housing shortage. Immediately north of town along Portage Lake is a concentration of small homes, many of which are rented to tourists in the summer.

The commercial character of the Village is primarily roadside commercial and composed primarily of retail shops, restaurants, and service establishments. Within the town are a number of vacant lots, and additional large vacant areas are located north and east of town. East of town along the lake is a large vacant tract of land which was previously occupied by the Worchester Lumber Company. A portion of this tract has been acquired by the township and is planned for development as the new Township Park.

Community facilities include an athletic field, and baseball and football fields. An outdoor ice arena is located near the public school complex but is poorly maintained. The Chassell Township High School, Southwell Elementary School, and



- Legend**
- FOREST AND WILDERNESSES
 - BOGOT RESIDENTIAL
 - RESIDENTIAL
 - PARK AND OPEN SPACE
 - COMMERCIAL

I. land use inventory

Chassell Township Park Western Upper Peninsula Parks



APRIL, LATE MAY & NOV TO
DECEMBER - ADVISORY PARKING

0 1000 FEET



a new building for the kindergarten are all located on the same block in the Village. These schools serve all the children in the township.

The only other concentrations of population in the township are Portage Entry, a small village located where the Portage River enters Keweenaw Bay, and Klingville, in the southeast portion of the township.

Local Economy

The Village of Chassell grew up as a lumber processing center with limited influences from area mining activities. Extensive lumbering operations ended by 1920, and today the Village is primarily residential. The few commercial establishments include service stations, restaurants, lodging facilities, and small retail shops. Most local residents and the summer tourist population go to the Houghton-Hancock area to do their shopping.

Chassell Township is well suited for agricultural purposes, and remains a productive farming district today. The soils and climate are especially well suited for strawberries, and most of the approximately 650 acres planted in Houghton County are located in Chassell Township. Chassell is the home of the Copper County Strawberry Festival. Farming activity has declined somewhat in recent years, as older farmers have abandoned their farms and moved to the Village of Chassell or other communities to retire. Thus, a significant percentage of the population consists of low income, retired people.

Many Chassell residents are employed by Michigan Technological University in Houghton, or work in commercial establishments of the surrounding area. Others work at mining operations in Ontonagon County or in the Ishpeming-Negaunee area.

Transportation Systems

The main route of transportation through Chassell is US-41, a two-lane, north-south highway which is in excellent condition. There is adequate parking along both sides of this road within the Village of Chassell to prevent the interruption or congestion of through traffic. Locally, many paved streets are in deteriorating condition and in need of resurfacing, while a number of gravel roads need to be repaired.

There is no local bus service, although the Greyhound bus line does offer connections in Houghton. The Soo Line Railroad crosses the township, but provides no passenger service. The nearest airport is in Houghton and is serviced by Republic and Simmons Commuter Airlines.

The Portage Lake Canal crosses the Keweenaw Peninsula and serves as a shortcut for freighters during bad weather. The deep water harbor facilities available in Houghton-Hancock, Dollar Bay, and Torch Lake are known as the Keweenaw Waterway. In 1968, the Keweenaw Waterway received 334,639 tons and shipped 1107 tons. These figures indicated there is not a significant export industry in the area.

NATURAL RESOURCES

Topography

Chassell Township has a variable topography with ridges and valleys which generally run southwest to northeast. Slopes along the ridges range from 8.1 to 15 percent, and exceed 15 percent in several small areas. However, most of the land in the township is quite flat, with slopes of less than 8 percent.

The northwestern portion of the township is the most rugged with elevations exceeding 1000 feet above msl (mean sea level datum). In the central portion,

elevations decrease to almost 600 feet along Pike Bay and the valleys of the Sturgeon and Snake Rivers. Extensive swampy areas are found between these two rivers and on the delta which forms at their mouths. East of the river valleys, elevations again rise to 757 feet on a small ridge in the east central portion of the township. Elevations along Keweenaw Bay range from 606 to 670 feet above sea level.

Geology and Soils

The bedrock of the western portion of the upper peninsula was formed during the Pre-Cambrian Era and is crystalline in nature. In the vicinity of Chassell Township, bedrock is from the Keweenaw sub-epoch, which occurred one billion years ago. Keweenaw bedrock is characterized by interlayered layers of lava and conglomerate which are overlain by slates and sandstones. The bedrock formation beneath Chassell is Jacobsville Sandstone. It is unclear exactly how far below the surficial sediments the bedrock is located, but it is at sufficient depth that development and agricultural activities have not been influenced.

Surficial sediments were derived primarily from glacial activity during the Pleistocene Period. Till plains, or ground moraines are the predominant glacial features in Chassell Township. These till plains are composed of unsorted sand, gravel, silt, clay, cobbles, and boulders. Along Keweenaw Bay is an old lake bed, composed of silt, clay, and fine sand which was deposited in ponded meltwater.

These glacial deposits are the primary parent material in which soils are formed. Soils have differing characteristics because glacial materials are not uniform in composition and because soils are formed under differing drainage, cover and climatic conditions.

Soils along Keweenaw Bay are deep wet loams. However, some areas may be very stony or may include well-drained loams and organic soils. These soils pose

moderate limitations to most types of recreational development, and severe limitations to sewage disposal systems.

In the swampy areas along the Sturgeon and Snake Rivers are organic, wet sandy soils. These soils are nearly level and very poorly drained, and thus are unsuitable for most forms of recreation. The western portion of the township has deep loamy soils and deep loamy soils closely associated with sands. Deep loamy soils, also found east of the swampy area, are gently sloping to moderately steep, well-drained and moderately well-drained soils. Most areas are associated with rock outcrops. These soils present only slight to moderate limitations to most forms of recreational use. Deep loamy soils and closely associated sandy soils are gently sloping to moderately steep, well-drained and moderately well-drained soils. Most of the loamy soils are underlain by a clay pan which restricts the downward movement of water. Only slight limitations to recreational use are presented by these soils.

Climatic Conditions

The western upper peninsula is characterized by extreme seasonal temperature variations and large amounts of snow during the winter months.

Data from a weather station at Calumet indicates that average annual precipitation in the Keweenaw Peninsula is 34.02 inches, while an average of 152 inches of snow falls annually. The coldest month is January, when temperatures average 15.0°F. The hottest month is July, with an average temperature of 65.1°F. Prevailing winds are southerly during warm weather and northwesterly during the rest of the year.

Water Resources

Chassell Township lies in the Sturgeon and Portage Drainage area, both of which

flow into Lake Superior. The Sturgeon River basin includes the Snake River, Sturgeon River, Otter River, and a number of small tributaries. This basin drains western Baraga County and southern Houghton County, and empties into Portage Lake at Chassell. There are no known sources of municipal or industrial wastes discharging into the basin, but runoff from agricultural activities near the mouth may have a minor influence on water quality.

The Portage drainage area includes Portage Lake and River, the Trap Rock River and numerous creeks in northern Houghton County. The Portage River and lake serves as a shipping channel. Water quality problems in this drainage area are related to unchlorinated treatment plant effluent and raw sewage discharge from small communities in northern Houghton and southern Keweenaw Counties. Mine dewatering near the river mouth at Calumet also results in increased chloride concentration.

Groundwater availability in Chassell Township ranges from fair throughout most of the township to poor in highly localized areas. Groundwater quality is generally acceptable for most uses, though some wells contain objectionable amounts of iron. The water supply in most areas is derived from surface waters, particularly Lake Superior. However, the Village of Chassell depends on a spring located west of town.

Vegetation and Wildlife

Most of Chassell Township is agricultural, and thus retains little natural vegetation. In the southwestern corner of the township and scattered smaller areas are northern hardwood forests, the most common species association in the western Upper Peninsula. The northern hardwoods are a maple-birch climax community, a highly productive source of commercial timber. Forestry is not an important sector of the economy of Chassell Township. Small areas along Keweenaw Bay are forested by mixed hardwoods and softwoods. The low-lying area along the Sturgeon and Snake Rivers is a conifer swamp.

Important wildlife habitats have been identified by the Western Upper Peninsula Regional Planning Commission. The Sturgeon River basin, also known as the Sturgeon Slough, is a highly productive waterfowl area. The area is used by such species as ducks, geese, cranes, kingfishers, and other water birds, for feeding during migration and breeding activity. The Slough is one of three existing geese habitats in the Upper Peninsula.

Other types of wildlife found in the area are relatively mobile and do not have a particularly vulnerable habitat.

III RECREATION INVENTORY

A recreational inventory describes the types and location of the facilities currently in existence in the study area. Both private and public facilities are included. This baseline information is necessary to evaluate the recreational deficiencies in the study area.

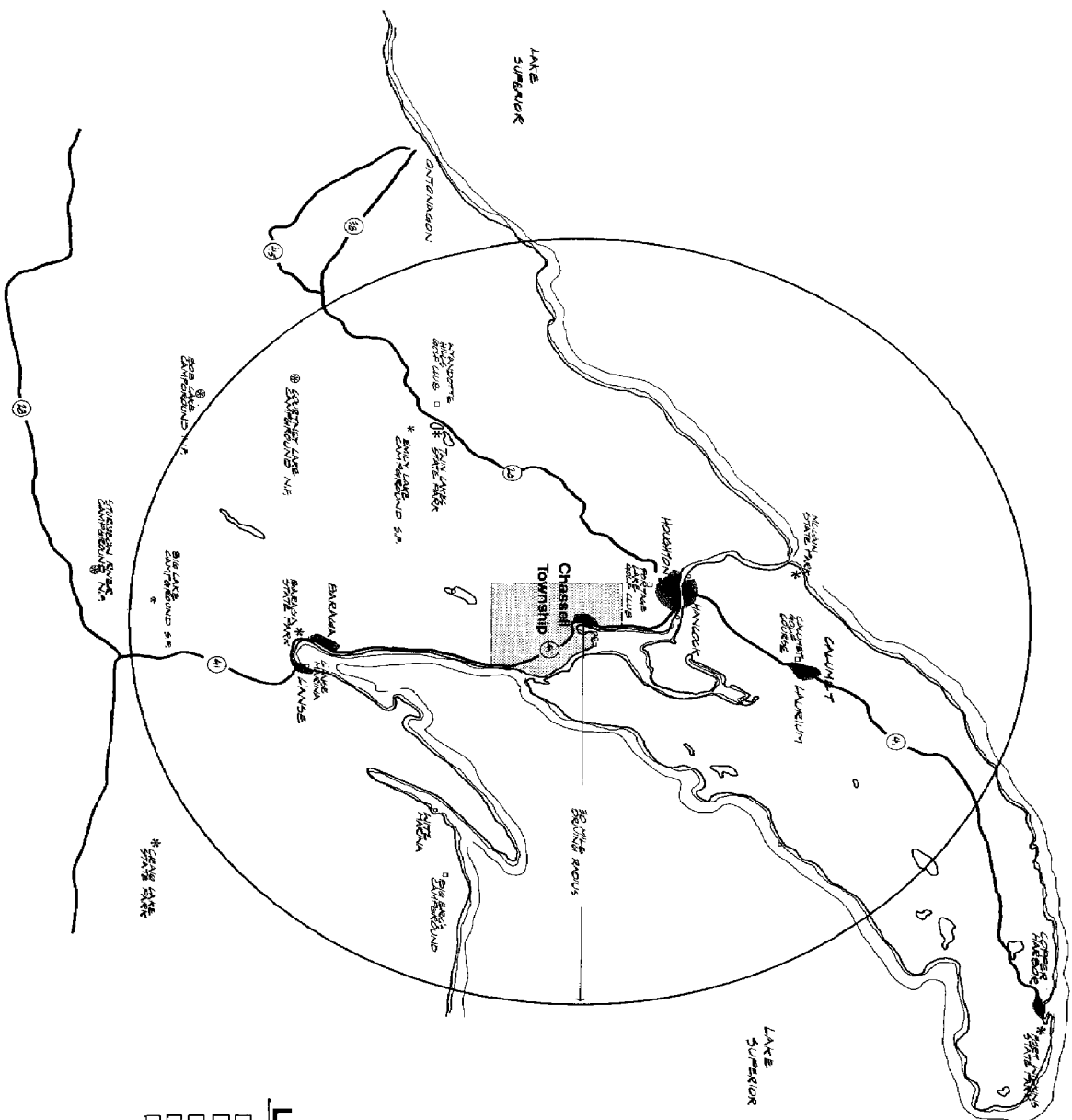
REGIONAL RECREATIONAL FACILITIES

Regional recreational facilities are large facilities which serve people in a broad geographic area. For the purposes of the Chassell Township Recreational Master Plan, the region has been defined as the area within a 30-mile radius of Chassell Township. The size and type of facilities vary, but included are State parks, State forest campgrounds, national forest campgrounds, and other areas. Particularly important to residents of Chassell Township are Baraga, Twin Lakes, and McLain State Parks. Regional recreational facilities are depicted in Map 2.

Regional facilities and the activities available at each have been listed in Figure 2 and located on Map 2. Other small parks within the 30-mile radius offer little regional attraction to Chassell residents and have thus been excluded. It should be noted that the actual driving distance to each site may be greater than 30 miles, because the 30-mile radius is based on "air distance" from Chassell Township. Travel time may be considerably longer.

LOCAL RECREATIONAL FACILITIES

The Chassell Township School System consists of three buildings located on the same block in the Village of Chassell. Facilities on the school grounds include one baseball diamond, a playground, a multi-purpose field, and a natural ice skating rink.



Legend

- STATE PARK
- * STATE LAND
- NATIONAL FOREST LAND
- PRIVATE RECREATION FACILITY
- + WILDLIFE - WETLANDS

2. recreation inventory

Chassell Township Park

Western Upper Peninsula Parks



Map by: James, Harris & May, Inc.
Copyright: 1998

Scale: 1 inch = 1 mile



Figure 2
Chassell Township Regional Recreational Facilities

	Acres	County	Playground	Picnicking	Swimming	Fishing	Hiking	Boating	Boat Ramp/Launch	Campground (no. of sites)	Electricity	Showers	Water	Scenic View	Notes
State Parks															
Twin Lakes State Park	175	H	X	X	X	X	X	X	X	62	X	X			
Craig Lake State Park	5784	B				X	X								snowmobile trail, wilderness area
Baraga State Park	56	B	X	X	X	X		X	X	140	X	X	X		
McLain State Park	401	H	X	X	X		X			90	X	X	X		
State Forest Campgrounds															
Emily Lake	(Lake=138)	H			X	X		X	X	9					
Big Lake		B			X	X		X	X	12					no motorboats
Big Erick's Bridge		B			X	X	X		X	20					canoes only
Law's Lake	(Lake=15)	B			X	X		X	X	5					no motorboats
National Forest Campgrounds															
Courtney Lake	21	O		15	X	X		X	X	21			X		
Bob Lake	15	H		9	X	X	X	X	X	17			X		water skiing, interpretive trail
Sturgeon River	4	B				X				9			X	X	
Other Public Facilities (publicly-owned)															
Silver Mountain	1000	H				X								X	underdeveloped, historic
Pelkie Fairground	2.5	B									X		X		ski jump, horseshoe pits
Sand Hills Light House	40	B												X	historic
L'Anse Marina (city-owned)															water skiing & high-speed boating at selected hours
Wyandotte Hills Golf Course	100	H													
Calumet Golf Course		H													
Portage Lake Golf Course		H													18-hole
Limestone Mt.	10	H													possible redevelopment of ski hill
Otter Lake		H			X	X		X	X						mostly private facilities
Otter River Canoe Route									X						canoe access
Sturgeon River Canoe Route									X						8 miles: Otter Lake to Portage Lake
Portage Lake Access									X						numerous public access sites along lake
Michigan Technological University	23	H													4 multi-purpose fields, tennis court, baseball diamond, archery and rifle range, horseshoe pit, skiing, gym, football field, skating
Privately-Owned Facilities															
Pequaming	850	B					X	X	X						historic Ford Mill and town
Witz Marina & Campsite				X	X			X	X	50	X		X		commercial & recreational
Adventure Ski Area		H													one rope tow

B - Baraga

H - Houghton

O - Ontonagon

The Chassell Community Building contains four bowling lanes and a basketball court used by the school system. The Chassell Township Park, a recently acquired site on Pike Bay within the Village of Chassell, is presently undeveloped. A township park which was located north of town, was exchanged for this new site, and has been abandoned. The township operates no other recreational facilities.

The Michigan Department of Natural Resources maintains a public access site at the Sturgeon River Slough where the Sturgeon River empties into Pike Bay. This access site is located two miles south of the Village of Chassell and is the only public access in the township. The Slough is known for hunting and fishing opportunities, as the wetland swamp provides excellent fish and waterfowl habitat. The Army Corps of Engineers has operated an access site at Portage Entry in previous years. This site is located five miles south of the Village, and includes a large concrete pier used to tie up ore boats and a picnic area. A lack of funds has caused this site to be poorly maintained and used infrequently by local residents.

In addition to these local recreational facilities, the City of Houghton and Michigan Technological University offers limited facilities for Chassell Township residents. A Houghton City Park is located a few miles north of the Village of Chassell on US-41. This park includes a boat ramp, picnic sites and limited court facilities. Further north on US-41 lies the campus of Michigan Technological University. While these extensive facilities are restricted to student use, certain facilities such as the ice arena, ball fields, football fields and tennis courts are available to the public on a limited basis.

IV ANALYSIS OF RECREATION DEFICIENCIES

In order to determine the future recreational program, it is important to assess the deficiencies of the local area. Two methods of analysis are used for this assessment. The first method compares national recreation standards with local facilities. The second method is based upon a citizen survey and input from the local communities in order to determine needed facilities. By using these methodologies an accurate assessment of recreational deficiencies for Chassell Township can be made.

Recreational standards provide guidance to a community regarding the type and amount of park space and recreational facilities. The park space standards developed by the National Recreation and Parks Association are used in this analysis. Figure 3 compares Chassell Township's existing facilities to NRPA standards. The standards are applied to a 1980 base population of 1,572 and a 1990 population of 1,807 (Figure 1). According to these standards, there is a current deficiency of one tennis court and three basketball courts. Other facilities such as ball diamonds and playlots are provided by the Township and meet NRPA standards. The Township is fortunate to have an ice rink and community center and for these facilities the Township exceeds the suggested standards.

Another method of determining recreational deficiency is through citizen surveys and community input. In May of 1980, the Chassell Township Board, the Park Development Committee and interested citizens discussed the future recreation program of the Township. During this meeting, recreational priorities were discussed and are summarized as follows:

- boating access
- water access (picnicking and viewing)
- swimming
- horseshoes
- tennis

Figure 3
Chassell Township Recreational Facility Deficiencies

Facility Type	1979 NRPA Requirement	1980 Township Inventory	1990 NRPA Requirement	1990 NRPA Deficiency
Baseball Diamonds	0	1	0	0
Softball Diamonds	0	0	0	0
Tennis Courts	1	0	1	1
Basketball Courts	3	0	4	4
Swimming Pool	0	0	0	0
Artificial Ice Rink	0	1	0	0
Community Center	0	1	0	0
18-Hole Golf Course	0	0	0	0
Picnic Areas	0	0	0	0
Playlot	1	1	1	0

Water-related facilities were considered to be of primary importance to the Township. The presence of Portage Lake without the means of local access was very disconcerting. Horseshoes were also considered important because of heavy local interest and tournaments. Finally, residents objected to the lack of local public tennis courts.

A brief recreation questionnaire was also distributed at this meeting. Residents were asked to circulate the questionnaire among neighbors and friends who were not able to attend the meeting. While the number of surveys returned was limited, the results were similar to the deficiencies determined at the public meeting.

To summarize future needs, the recreation standards and local opinion both emphasize the need for a tennis court. While the standards do not address water-related activities, public input demonstrates that a boat access ramp, beach area, and picnic facilities are needed.

V RECREATION GOALS AND OBJECTIVES

After discussions with residents concerning future recreational development, certain goals and objectives can be stated. The goals and objectives have been reviewed and approved by interested citizens and they reflect a general consensus for future development. Long-range goals and short-term objectives are defined as follows:

Long-range goals are a desired end product toward which the Township's efforts should be directed. The time frame for long-range goals should be ten years or longer.

Short-term objectives are more specific desired accomplishments within a time frame of the next five years. Objectives should be formulated to meet long-range goals.

The following goals and objectives have been identified for Chassell Township.

Goal 1: Park and recreation facilities should maximize opportunities for water related recreation near Portage Lake.

Objective 1A: Chassell Township should develop a public boat launch site to provide access to Portage Lake.

Objective 1B: Swimming, waterfront, picnicking, and lake viewing should be available to the residents of Chassell Township.

Goal 2: Park and recreation facilities should provide a variety of recreational opportunities for residents and tourists of all ages.

Objective 2A: Children, families, and senior citizens should all have recreational opportunities ranging from active play areas, to passive recreation activities.

Objective 2B: While use by local residents should be the primary concern, facilities for tourists should also be considered.

Goal 3: The Township should provide recreational opportunities which are either unavailable or inaccessible to its residents in regional or state recreation areas.

Objective 3A: State or national forests and facilities provided by regional centers such as Houghton-Hancock will continue to provide major recreational facilities. Chassell Township facilities should be intended for use on the local scale and should not duplicate facilities which are easily accessible elsewhere.

Goal 4: Park and recreation facilities should be designed to protect and enhance the natural resources of each site.

Objective 4A: Parks should preserve shoreline vegetation and minimize on-site erosion hazards.

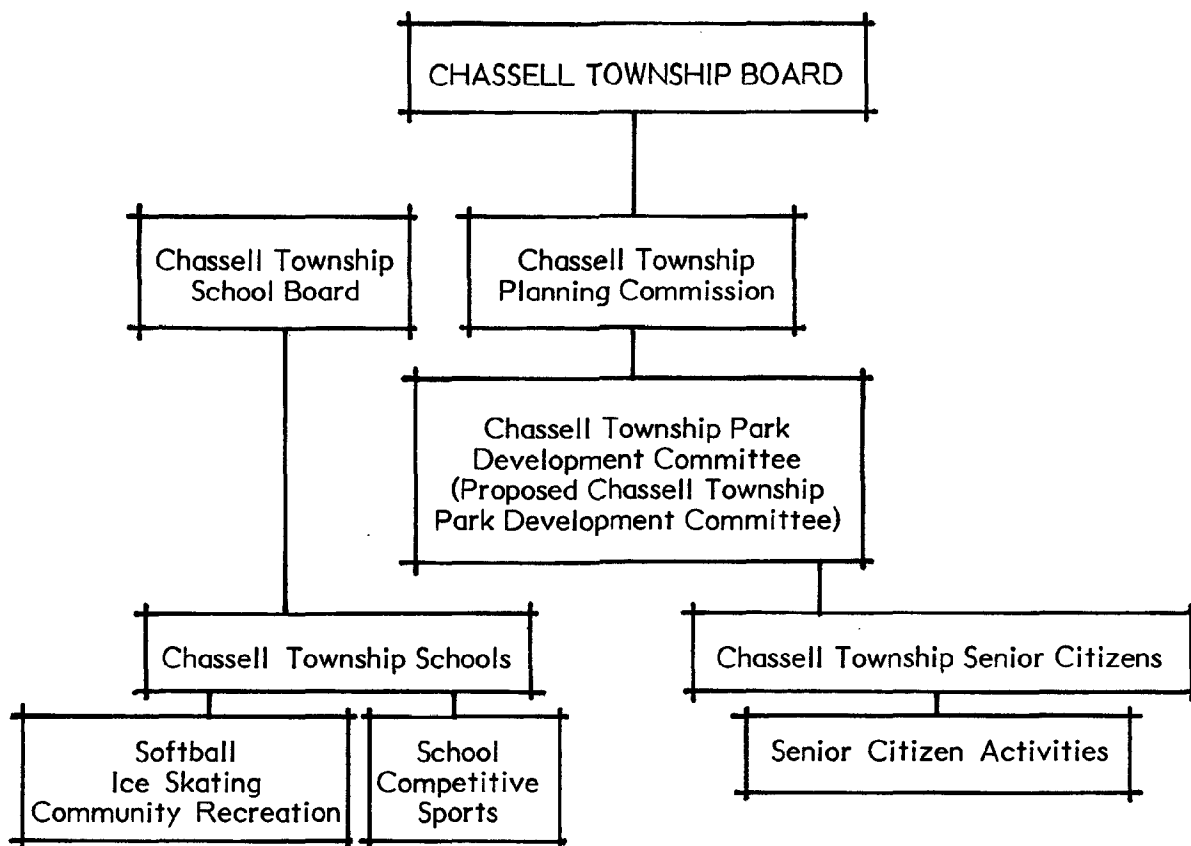
Objective 4B: Parks should minimize human abuse and should be designed in a manner which will enhance existing site features.

VI ADMINISTRATIVE STRUCTURE

In December 1979, the Chassell Township Board authorized the appointment of the Chassell Township Park Development Committee. This committee was authorized to coordinate the development of recreational facilities within Chassell Township. While primary responsibilities are directed toward the development of the Township Park at the Worchester Lumber Mill site, the committee also acts as a general recreation advisory committee to the Township Board. Upon development of the site, it is expected that the Park Development Committee will be transformed into the Township's Recreation Committee and continue to act as an advisory body to the Township Board. Figure 4 illustrates the existing and proposed administrative structure.

Competitive athletics and educational recreation programming are administered through the Chassell Township Schools. The administration and the school board have the responsibility of managing the athletic facilities on the school sites, as well as the Community Activities Building.

Figure 4
Chassell Township Recreation Administration



VII ACTION AND FINANCIAL PROGRAM

To insure the implementation of proposed recreation facilities an action and financial program has been developed. The program covers the first five years of the plan and runs from 1981 to 1986. Park development efforts will be focussed upon the Township Park (Worcester Lumber site) and development phases are sequentially ordered in Figure 5. Estimated costs and funding sources have also been included.

**Figure 5
Chassell Township
Five-Year Recreation Action Plan**

<u>Year</u>	<u>Project</u>	<u>Estimated Cost</u>	<u>Funding Sources</u>
1981	1) Develop boat ramp, parking and access road	\$30,000	MDNR-Waterways Div. Township
1982	2) Develop picnic sites, beach, restrooms, drainage courses, bridges and fencing	\$36,000	LAWCON Township MDNR-Waterways Div.
1983	3) Relocate picnic pavillion and add play equipment	\$ 5,000	Township
1983	4) Construct horseshoe pits on park site and continue with landscaping improvements and fencing	\$12,000	Township
1984	5) Construct two tennis courts on township school site	\$24,000	LAWCON Township
1985	6) Construct outdoor basketball court and update play equipment	\$ 8,000	LAWCON Township
1986	7) Construct asphalt pathways and improve site landscaping of waterfront park	\$15,000	LAWCON Township

VIII CHASSELL TOWNSHIP PARK - SITE PLAN SUMMARY

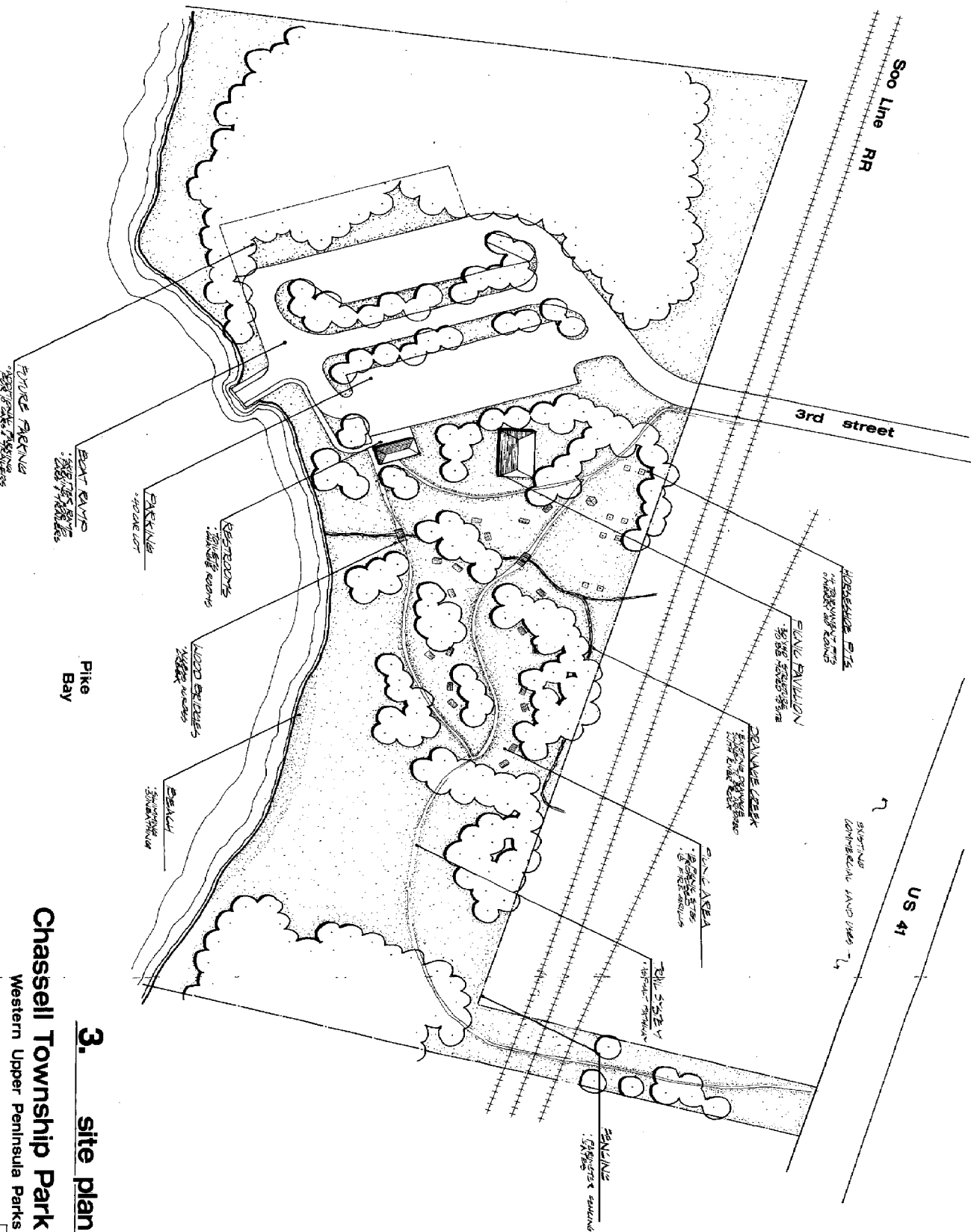
The Chassell Township Park Site is currently undeveloped. Mature vegetation is found on the extreme north and south ends; otherwise the site is sparsely vegetated. The terrain slopes gently toward Pike Bay and two drainage courses divide the site.

The proposed site plan for Chassell Township includes the following features:

- boat ramp and parking for 10 cars with trailers
- 40-car parking lot for park users
- access road
- restrooms with flush toilets and changing facilities
- relocated picnic pavillion
- 18 picnic sites with 18 tables and fire grills
- 4 horseshoe pits
- 1 merry-go-round
- improved drainage courses
- wooden footbridges over drainage courses
- asphalt pathways (approximately 2000 linear feet)
- fencing along site perimeter

While original discussions included the future construction of campsites, it was determined that sufficient land for camping is not available. Parking has been located next to the boat ramp in order to minimize pedestrian conflicts and concentrate auto access. The two existing drainage courses have been consolidated. River rock armor is proposed along the banks in order to stabilize erosion and to provide an attractive appearance. Two small wooden footbridges are proposed to cross the creek. The creek divides the intensive park uses from the

passive park uses in order to minimize user conflicts. The beach and swimming area is proposed for the north end of the site in order to minimize conflicts with the boat ramp and boaters. Finally, a pedestrian access and pathway are located on the north end of the site and adjoins U.S. 41. Approximate costs for the development of this park site are outlined in the preceding action plan. Map 3 depicts the Chassell Township Park Site Plan.



3. site plan

Chassell Township Park Western Upper Peninsula Parks



Project: Upper Peninsula Parks
Location: Chassell Township
Date: 10/1/2010

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